

**BY ORDER OF THE CHIEF,
NATIONAL GUARD BUREAU**

MANPOWER STANDARD 43D1T1

1 JULY 2001



Manpower Standard

**SECURITY FORCES COMBAT ARMS TRAINING
AND MAINTENANCE (CATM)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the NGB PDC WWW site at:
<http://www.ngbpdc.ngb.army.mil/angseries.asp>

OPR: ANG/XPME (Mr. S. Griffith)

Certified by: ANG/CS (Col S. Wassermann)

Pages: 13

Distribution: F

This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the process oriented description (POD) for varying levels of workload in the 204th Security Forces Squadron, Ft Bliss, TX. This ANGMS applies to the 204th Security Forces Squadron, Combat Arms Training and Maintenance (CATM) mission only. This standard applies to peacetime operations only. The Air National Guard (ANG) is the authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the Security Forces Support function. This standard was developed in accordance with AF Instruction (AFI) 38-201, *Determining Manpower Requirements*, and AF Manual (AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP) - Processes*, and AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*. Send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through channels, to ANG, Management Engineering Branch (ANG/XPME/Operating Location TN [OLTN]), 106 Briscoe Drive, McGhee Tyson ANG Base, TN 37777-6283.

1. STANDARD DATA.

1.1. Approval Date: 1 July 2001.

1.2. Man-hour Data Source: Operational Audit method (historical record and technical estimate techniques).

1.3. Standard Man-hour Equation: $Y = 151.9 + 7.980X$.

1.4. Workload Factor.

1.4.1. Title: Total Military Security Forces Population Supported.

1.4.2. Definition: The average monthly Security Forces (3PXXX) population supported within the 204th Security Forces Squadron.

1.4.3. Source: Unit Manpower Document (UMD) (34 Command File Part B) maintained by ANG/XPMM.

1.4.4. Points of Contact.

1.4.4.1. Functional: Major Daniel Steiner, ANG/204SFS

1.4.4.2. Manpower: Mr. Steve Griffith, ANG/XPME

2. APPLICATION INSTRUCTIONS:

2.1. Step 1. Man-hour Equation. Apply the man-hour equation in Paragraph 1.3., to determine required man-hours.

2.2. Step 2. Man-hour Availability Factor (MAF). Divide the resulting man-hours by the appropriate MAF times the overload factor.

2.3. Step 3. Upper and Lower Extrapolation Limits:

2.3.1. $Y_U = 1252.93$.

2.3.2. $Y_L = 751.76$.

2.4. Step 4. Air Force Specialty Codes (AFSC) Requirement. Use the Manpower Table Attachment 3 to determine required AFSCs.

3. STATEMENT OF CONDITIONS. The conditions listed below had no affect on the development of this standard: minimum response rates, minimum manpower levels, standardized crew complements, safety considerations, aircraft turn-around time, length of waiting periods, levels of backlog and hours of operation.

DANIEL JAMES III, Lieutenant General, USAF
Director, Air National Guard

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 38-201, *Determining Manpower Requirements*

AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP)-Processes*

AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*

AFMS 00AA, *Standard Indirect Description*

Abbreviations and Acronyms

AF - Air Force

AFI - Air Force Instruction

AFSC - Air Force Specialty Codes

ANG - Air National Guard

ANGI - Air National Guard Instruction

ANGMS - Air National Guard Manpower Standard

CATM - Combat Arms Training and Maintenance

FMB - Financial Management Board

MAF - Man-hour Availability Factor

MEP - Management Engineering Program

POD - Process Oriented Description

TCTO - Time Compliance Technical Order

TDY - Temporary duty

TO - Technical Orders

UMD - Unit Manpower Document

UTA - Unit Training Assembly

Terms

Air National Guard Manpower Standard (ANGMS). A numbered, specialized publication that quantifies manpower requirements for a work center. Also includes approved variances. See AFI 38-201.

Man-hour. A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Manpower Standard. The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

Process Oriented Description. A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

Attachment 2

**PROCESS ORIENTED DESCRIPTION
COMBAT ARMS TRAINING AND MAINTENANCE (CATM)**

Table A2.1. Listing of Functional Processes.

1.	RESOURCE PROTECTION.
1.1.	PERFORMS DAILY OPENING AND CLOSING OF FACILITY.
1.2.	MAINTAINS KEY CONTROL LOG.
1.3.	PERFORMS WEEKLY ALARM CHECK.
1.4.	PERFORMS SEMI-ANNUAL SERIALIZED WEAPON INVENTORY.
2.	GROUND WEAPON TRAINING.
2.1.	PREPARES MATERIAL.
2.1.1.	PREPARES MATERIAL FOR MK19 GRENADE LAUNCHER.
2.1.2.	PREPARES MATERIAL FOR M2, 50 CAL MACHINE-GUN.
2.1.3.	PREPARES MATERIAL FOR M252, M81 MORTAR TUBE.
2.1.4.	PREPARES MATERIAL FOR M16A2, SEMI-AUTOMATIC RIFLE.
2.1.5.	PREPARES MATERIAL FOR M9, PISTOL.
2.1.6.	PREPARES MATERIAL FOR M249, AUTOMATIC RIFLE.
2.1.7.	PREPARES MATERIAL FOR M60, MACHINE GUN.
2.1.8.	PREPARES MATERIAL FOR M203, GRENADE LAUNCHER.
2.2.	DEVELOPS AND MAINTAINS CLASS SCHEDULE. Develops and maintains class schedule for all weapon types.
2.3.	PERFORMS PRE-CLASSROOM ACTIVITY.
2.3.1.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE MK19 GRENADE LAUNCHER.
2.3.2.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M2, 50 CAL MACHINE GUN.

2.3.3.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M252, M81 MORTAR TUBE.
2.3.4.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M16A2, SEMI-AUTOMATIC RIFLE.
2.3.5.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M9, PISTOL.
2.3.6.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M249, AUTOMATIC RIFLE.
2.3.7.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M60, MACHINE GUN.
2.3.8.	PERFORMS PRE-CLASSROOM ACTIVITY RELATING TO THE M203, GRENADE LAUNCHER.
2.4.	CONDUCTS CLASSROOM TRAINING.
2.4.1.	CONDUCTS CLASSROOM TRAINING FOR THE MK19 GRENADE LAUNCHER.
2.4.2.	CONDUCTS CLASSROOM TRAINING FOR THE M2, 50 CAL MACHINE GUN.
2.4.3.	CONDUCTS CLASSROOM TRAINING FOR THE M252, M81 MORTAR TUBE.
2.4.4.	CONDUCTS CLASSROOM TRAINING FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
2.4.5.	CONDUCTS CLASSROOM TRAINING FOR THE M9, PISTOL.
2.4.6.	CONDUCTS CLASSROOM TRAINING FOR THE M249, AUTOMATIC RIFLE.
2.4.7.	CONDUCTS CLASSROOM TRAINING FOR THE M60, MACHINE GUN.
2.4.8.	CONDUCTS CLASSROOM TRAINING FOR THE M203, GRENADE LAUNCHER.
2.5.	TRAVELS TO RANGE.
2.5.1.	TRAVELS TO RANGE TO FIRE THE MK19 GRENADE LAUNCHER.
2.5.2.	TRAVELS TO RANGE TO FIRE THE M2, 50 CAL MACHINE GUN.

2.5.3.	TRAVELS TO RANGE TO FIRE THE M252, M81 MORTAR TUBE.
2.5.4.	TRAVELS TO RANGE TO FIRE THE M16A2, SEMI-AUTOMATIC RIFLE.
2.5.5.	TRAVELS TO RANGE TO FIRE THE M9, PISTOL.
2.5.6.	TRAVELS TO RANGE TO FIRE THE M249, AUTOMATIC RIFLE.
2.5.7.	TRAVELS TO RANGE TO FIRE THE M60, MACHINE GUN.
2.5.8.	TRAVELS TO RANGE TO FIRE THE M203, GRENADE LAUNCHER.
2.6.	PREPARES RANGE.
2.6.1.	PREPARES RANGE FOR THE MK19 GRENADE LAUNCHER.
2.6.2.	PREPARES RANGE FOR THE M2, 50 CAL MACHINE GUN.
2.6.3.	PREPARES RANGE FOR THE M252, M81 MORTAR TUBE.
2.6.4.	PREPARES RANGE FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
2.6.5.	PREPARES RANGE FOR THE M9, PISTOL.
2.6.6.	PREPARES RANGE FOR THE M249, AUTOMATIC RIFLE.
2.6.7.	PREPARES RANGE FOR THE M60, MACHINE GUN.
2.6.8.	PREPARES RANGE FOR THE M203, GRENADE LAUNCHER.
2.7.	CONDUCTS LIVE FIRE.
2.7.1.	CONDUCTS LIVE FIRE FOR THE MK19 GRENADE LAUNCHER.
2.7.2.	CONDUCTS LIVE FIRE FOR THE M2, 50 CAL MACHINE GUN.
2.7.3.	CONDUCTS LIVE FIRE FOR THE M252, M81 MORTAR TUBE.
2.7.4.	CONDUCTS LIVE FIRE FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
2.7.5.	CONDUCTS LIVE FIRE FOR THE M9, PISTOL.
2.7.6.	CONDUCTS LIVE FIRE FOR THE M249, AUTOMATIC RIFLE.
2.7.7.	CONDUCTS LIVE FIRE FOR THE M60, MACHINE GUN.
2.7.8.	CONDUCTS LIVE FIRE FOR THE M203, GRENADE LAUNCHER.

2.8.	TAKES DOWN RANGE.
2.8.1.	TAKES DOWN RANGE AFTER FIRING THE MK19 GRENADE LAUNCHER.
2.8.2.	TAKES DOWN RANGE AFTER FIRING THE M2, 50 CAL MACHINE GUN.
2.8.3.	TAKES DOWN RANGE AFTER FIRING THE M252, M81 MORTAR TUBE.
2.8.4.	TAKES DOWN RANGE AFTER FIRING THE M16A2, SEMI-AUTOMATIC RIFLE.
2.8.5.	TAKES DOWN RANGE AFTER FIRING THE M9, PISTOL.
2.8.6.	TAKES DOWN RANGE AFTER FIRING THE M249, AUTOMATIC RIFLE.
2.8.7.	TAKES DOWN RANGE AFTER FIRING THE M60, MACHINE GUN.
2.8.8.	TAKES DOWN RANGE AFTER FIRING THE M203, GRENADE LAUNCHER.
2.9.	TRAVELS FROM RANGE.
2.9.1.	RETURNS FROM RANGE AFTER FIRING THE MK19 GRENADE LAUNCHER.
2.9.2.	RETURNS FROM RANGE AFTER FIRING THE M2, 50 CAL MACHINE GUN.
2.9.3.	RETURNS FROM RANGE AFTER FIRING THE M252, M81 MORTAR TUBE.
2.9.4.	RETURNS FROM RANGE AFTER FIRING THE M16A2, SEMI-AUTOMATIC RIFLE.
2.9.5.	RETURNS FROM RANGE AFTER FIRING THE M9, PISTOL.
2.9.6.	RETURNS FROM RANGE AFTER FIRING THE M249, AUTOMATIC RIFLE.
2.9.7.	RETURNS FROM RANGE AFTER FIRING THE M60, MACHINE GUN.
2.9.8.	RETURNS FROM RANGE AFTER FIRING THE M203, GRENADE LAUNCHER.
3.	MUNITIONS MANAGEMENT. Forecasts, requisitions, receives, inventories, documents, and stores munitions for all weapon types.
4.	RANGE MAINTENANCE. Repairs and maintains targets for all weapon types.

5.	WEAPON MAINTENANCE AND INSPECTION.
5.1.	SCHEDULES INSPECTION AND MAINTENANCE.
5.1.1.	INSPECTS AND MAINTAINS THE MK19 GRENADE LAUNCHER.
5.1.2.	INSPECTS AND MAINTAINS THE M2, 50 CAL MACHINE GUN.
5.1.3.	INSPECTS AND MAINTAINS THE M252, M81 MORTAR TUBE.
5.1.4.	INSPECTS AND MAINTAINS THE M16A2, SEMI-AUTOMATIC RIFLE.
5.1.5.	INSPECTS AND MAINTAINS THE M9, PISTOL.
5.1.6.	INSPECTS AND MAINTAINS THE M249, AUTOMATIC RIFLE.
5.1.7.	INSPECTS AND MAINTAINS THE M60, MACHINE GUN.
5.1.8.	INSPECTS AND MAINTAINS THE M203, GRENADE LAUNCHER.
5.2.	MAINTAINS WEAPON SPARE PARTS.
5.2.1.	MAINTAINS SPARE PARTS FOR THE MK19 GRENADE LAUNCHER.
5.2.2.	MAINTAINS SPARE PARTS FOR THE M2, 50 CAL MACHINE GUN.
5.2.3.	MAINTAINS SPARE PARTS FOR THE M252, M81 MORTAR TUBE.
5.2.4.	MAINTAINS SPARE PARTS FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
5.2.5.	MAINTAINS SPARE PARTS FOR THE M9, PISTOL.
5.2.6.	MAINTAINS SPARE PARTS FOR THE M249, AUTOMATIC RIFLE.
5.2.7.	MAINTAINS SPARE PARTS FOR THE M60, MACHINE GUN.
5.2.8.	MAINTAINS SPARE PARTS FOR THE M203, GRENADE LAUNCHER.
5.3.	TRAVELS TO LOCATION TO PERFORM INSPECTION AND MAINTENANCE. Travels off-site to perform inspection and maintenance for the MK19 Grenade Launcher, the M2 50 Cal Machine Gun, and the M252 M81 Mortar Tube.
5.4.	PERFORMS PRE-ISSUE INSPECTION.
5.4.1.	PERFORMS PRE-ISSUE INSPECTION FOR THE MK19 GRENADE LAUNCHER.

5.4.2.	PERFORMS PRE-ISSUE INSPECTION FOR THE M2, 50 CAL MACHINE GUN.
5.4.3.	PERFORMS PRE-ISSUE INSPECTION FOR THE M252, M81 MORTAR TUBE.
5.4.4.	PERFORMS PRE-ISSUE INSPECTION FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
5.4.5.	PERFORMS PRE-ISSUE INSPECTION FOR THE M9, PISTOL.
5.4.6.	PERFORMS PRE-ISSUE INSPECTION FOR THE M249, AUTOMATIC RIFLE.
5.4.7.	PERFORMS PRE-ISSUE INSPECTION FOR THE M60, MACHINE GUN.
5.4.8.	PERFORMS PRE-ISSUE INSPECTION FOR THE M203, GRENADE LAUNCHER.
5.5.	PERFORMS PRE-EMBARKATION INSPECTION.
5.5.1.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE MK19 GRENADE LAUNCHER.
5.5.2.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M2, 50 CAL MACHINE GUN.
5.5.3.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M252, M81 MORTAR TUBE.
5.5.4.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
5.5.5.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M9, PISTOL.
5.5.6.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M249, AUTOMATIC RIFLE.
5.5.7.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M60, MACHINE GUN.
5.5.8.	PERFORMS PRE-EMBARKATION INSPECTION FOR THE M203, GRENADE LAUNCHER.
5.6.	PERFORMS POST-DEPLOYMENT INSPECTION.

5.6.1.	PERFORMS POST-DEPLOYMENT INSPECTION FOR THE MK19 GRENADE LAUNCHER.
5.6.2.	PERFORMS POST-DEPLOYMENT INSPECTION FOR THE M2, 50 CAL MACHINE GUN.
5.6.3.	PERFORMS POST-DEPLOYMENT INSPECTION FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
5.6.4.	PERFORMS POST-DEPLOYMENT INSPECTION FOR THE M9, PISTOL.
5.7.	PERFORMS SEMIANNUAL IN-USE INSPECTION. Performs semiannual in-use inspection on all weapons, as required.
5.8.	PERFORMS UNSCHEDULED MAINTENANCE.
5.8.1.	PERFORMS UNSCHEDULED MAINTENANCE ON THE MK19 GRENADE LAUNCHER.
5.8.2.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M2, 50 CAL MACHINE GUN.
5.8.3.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M252, M81 MORTAR TUBE.
5.8.4.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M16A2, SEMI-AUTOMATIC RIFLE.
5.8.5.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M9, PISTOL.
5.8.6.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M249, AUTOMATIC RIFLE.
5.8.7.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M60, MACHINE GUN.
5.8.8.	PERFORMS UNSCHEDULED MAINTENANCE ON THE M203, GRENADE LAUNCHER.
5.9.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION.
5.9.1.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE MK19 GRENADE LAUNCHER.
5.9.2.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M2, 50 CAL MACHINE GUN.

5.9.3.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M252, M81 MORTAR TUBE.
5.9.4.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M16A2, SEMI-AUTOMATIC RIFLE.
5.9.5.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M9, PISTOL.
5.9.6.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M249, AUTOMATIC RIFLE.
5.9.7.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M60, MACHINE GUN.
5.9.8.	COMPLETES INSPECTION AND MAINTENANCE DOCUMENTATION FOR THE M203, GRENADE LAUNCHER.
5.10.	ORDERS AND POSTS TECHNICAL ORDERS (TO). Orders and post TO for all weapon types.
6.	TEMPORARY DUTY (TDY) TRAVEL. Performs TDY travel to perform official job-oriented duty.
7.	UNIT TRAINING ASSEMBLY (UTA). Performs planning and scheduling task associated with preparation for UTA.
8.	INDIRECT: Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are Supervision, Administration, Meeting, Training, Supply, Equipment Maintenance, and Cleanup. See AFMS 00AA, <i>Standard Indirect Description</i> , for the standard indirect description.

Attachment 3

MANPOWER TABLE

Table A3.1. Standard Manpower Table.

WORK CENTER/FAC SFS Combat Arms Trng and Maint FAC/43D1T1		APPLICABILITY MANHOUR RANGE 751.76 – 1252.93					
Air Force Specialty Title	AFSC	Grade	Manpower Requirement				
Security Forces Craftsman	3P071	AGR	3	4	4	5	
Security Forces Journeyman	3P051B	AGR	2	2	3	3	
Total			5	6	7	8	

NOTE. AFSCs may be adjusted at the discretion of the Commander.